

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/000913

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> C10M133/04, 133/16//C10N30:04, 30:06, 40:04, 40:25

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> C10M133/04-133/16, C10N30:04-30:06, 40:04, 40:25-40:28

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Jitsuyo Shinan Toroku Koho	1996-2005
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 56-8380 A (Texaco Development Corp.), 28 January, 1981 (28.01.81)	1-5
X	JP 6-158075 A (THE LUBRIZOL CORP.), 07 June, 1994 (07.06.94)	1-5
X	JP 32-3263 B1 (Masanori SATO), 01 June, 1957 (01.06.57)	1-5
X	JP 59-227982 A (Kao Soap Co., Ltd. et al.), 21 December, 1984 (21.12.84)	1-5
X	JP 11-193391 A (Sanyo Chemical Industries, Ltd. et al.), 21 July, 1999 (21.07.99)	1-5

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search  
20 April, 2005 (20.04.05)Date of mailing of the international search report  
17 May, 2005 (17.05.05)Name and mailing address of the ISA/  
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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 11-199881 A (Sanyo Chemical Industries, Ltd. et al.), 27 July, 1999 (27.07.99)	1-5
X	JP 10-195476 A (Lion Corp.), 28 July, 1998 (28.07.98)	1-5
X	JP 7-305083 A (Hitachi, Ltd.), 21 November, 1995 (21.11.95)	1-5

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
**PCT/JP2005/000913**

JP 56-8380 A	1981.01.28	BE 884063 A BR 8003321 A CA 1146557 A DE 3023362 A1 FR 2460300 A1 GB 2054607 A IT 1131391 B US 4253980 A US 4306070 A	1980.12.29 1980.12.30 1983.05.17 1981.01.15 1981.02.27 1981.02.18 1986.06.18 1981.03.03 1981.12.15
JP 6-158075 A	1994.06.07	AU 9341578 A BR 9302347 A CA 2099802 A1 CN 1081706 A DE 69311215 T2 EP 578490 A1 IL 106236 A US 5308521 A	1994.01.13 1994.02.16 1994.01.09 1994.02.09 1997.07.10 1994.01.12 1996.05.14 1994.05.03
JP 32-3263 B1	1957.06.01	(Family: none)	
JP 59-227982 A	1984.12.21	(Family: none)	
JP 11-193391 A	1999.07.21	(Family: none)	
JP 11-199881 A	1999.07.27	(Family: none)	
JP 10-195476 A	1998.07.28	(Family: none)	
JP 7-305083 A	1995.11.21	(Family: none)	

